REMARKS / ARGUMENTS

Status of Claims

Claims 1-72 are pending in the application. Claims 1-11 and 31-46 and 68-72 stand rejected. Claims 12-30 and 47-67 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant appreciates the Examiner's comments regarding the allowability of the noted claims. Applicant has amended Claims 1 and 36, and has added new Claim 73, leaving Claims 1-73 for consideration upon entry of the present Amendment.

Applicant respectfully submits that the rejections under 35 U.S.C. §102(e) and 35 U.S.C. §103(a) have been traversed, that no new matter has been entered, and that the application is in condition for allowance.

Rejections Under 35 U.S.C. §102(e)

Claims 1-6, 9-11, 36-41 and 44-46 stand rejected under 35 U.S.C. §102(e) as being anticipated by Cho (U.S. Patent No. 6,795,118, hereinafter Cho).

Applicant traverses this rejection for the following reasons.

Applicant respectfully submits that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, ***in a single prior art reference.***" *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). Moreover, "[t]he identical invention must be shown in as complete detail as is contained in the *** claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Furthermore, the single source must disclose all of the claimed elements "arranged as in the claim." Structural Rubber Prods. Co. v. Park Rubber Co., 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984). Missing elements may not be supplied by the knowledge of one skilled in the art or the disclosure of another reference. Titanium Metals Corp. v. Banner, 778 F.2d 775, 780, 227 U.S.P.Q. 773, 777 (Fed. Cir. 1985).

The Examiner remarks in the Advisory Action Paper No. 20051101, continuation sheet, that "Cho teaches... [that] the windows are read out sequentially according to column-parallel readout architecture. And the [Cho] sliding window method is basically sliding one window to the next sequentially."

Applicant has amended Claims 1 and 36 to recite, inter alia,

"...wherein the sliding window is configured to slide from a first position to a second position ***such that the second position frames the same number of lines as the first position, the number of lines being greater than one, and the second position frames all but one of the lines from the first position.***"

No new matter has been added as antecedent support may be found in the specification as originally filed, such as at Paragraphs [0102-0103] and Figure 7 for example.

Here, Applicant claims a specific sliding window method that involves a window configured to slide from a first position to a second position ***such that the second position frames the same number of lines as the first position, the number of lines being greater than one, and the second position frames all but one of the lines from the first position.***

In comparing Cho with the instant invention, Applicant submits that Cho is absent a sliding window method where ***the window second position frames the same number of lines as the window first position, the number of lines being greater than one, and the window second position frames all but one of the lines from the window first position.***

The Examiner remarks that Cho teaches a sequential readout of windows, and that the sliding window method of Cho is basically sliding one window to the next sequentially.

If Applicant accepts the Examiner's interpretation of Cho, then it necessarily follows that each window of the sequential readout must be sequential, and therefore cannot have overlapping lines or the second position framing all but one of the lines of the first position.

Accordingly, Applicant submits that Cho does not disclose each and every element of the claimed invention ***arranged as claimed***, and therefore cannot be anticipatory.

Viewed another way, and by applying the ordinary meaning of the term "sequentially", Applicant submits that the Cho pixels are read out consecutively, or one after the other, which not only is substantially different from the claimed invention of a sliding window having overlapping lines from one position to the next, but also falls wholly short of anticipating the claimed invention in such a manner as to disclose each and every element of the claimed invention arranged as claimed.

At Paragraph [0103] and Figure 7, Applicant defines, describes and illustrates the meaning of the term "sliding window", and explains the use of the sliding window in context to the claimed invention. Here, Applicant describes the sliding window to have a position Wn (see solid lines of window in Figure 7) in the course of calculation, and to have a preceding position Wn-1 (see dotted lines in Figure 7). In Figure 7, Applicant illustrates the sliding window as occupying a number of image sensor lines such that, as the window slides, it does so one line at a time, ***thereby occupying all but one of the image sensor lines from position Wn-1 to position Wn***. Here, Applicant uses the term "sliding window" to mean exactly what it states, that is, a window that occupies a number of image sensor lines and that slides relative to those number of lines, where each slide from one position Wn-1 to another position Wn occupies some of the lines from the preceding position.

In respectful disagreement with the Examiner, Applicant finds Cho to be completely absent any disclosure whatsoever of the claimed sliding window, and respectfully disagrees that a sequential operation is the same as the claimed sliding window operation.

Cho specifically calls for read outs to be performed "...***a row at a time*** using column-parallel readout architecture", and that the "pixels read from ***each of the columns*** can be read out ***sequentially*** (consecutively, one after the other) using horizontal addressing circuit". Nowhere does Applicant find Cho to indicate that "a row at a time read out" or "one after the other read out" is the same as the claimed "sliding window".

Accordingly, Applicant submits that Cho is absent anticipatory disclosure of each and every element of the claimed invention arranged as claimed, and absent anticipatory disclosure in Cho of ***each and every element arranged as claimed***, Cho cannot be anticipatory.

Dependent claims inherit all of the limitations of the respective parent claim.

In view of the foregoing remarks, Applicant submits that Cho does not disclose each and every element of the claimed invention arranged as claimed, including their claimed attributes, and therefore cannot be anticipatory. Accordingly, Applicant submits that the Examiner's rejection under 35 U.S.C. §102(e) has been traversed, and respectfully requests that the Examiner reconsider and withdraw of this rejection.

Rejections Under 35 U.S.C. §103(a)

Claims 7-8, 35, 42-43 and 72 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Cho.

Claims 31-34 and 68-71 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Cho as applied to Claim 1, and further in view of Lawrence (U.S. Patent No. 6,219,443, hereinafter Lawrence).

Applicant traverses these rejections for the following reasons.

Applicant respectfully submits that the obviousness rejection based on the References is improper as the References fail to teach or suggest each and every element of the instant invention. For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). The Examiner must meet the burden of establishing that all elements of the invention are taught or suggested in the prior art. MPEP §2143.03.

In view of the amendments and remarks set forth above, Applicant submits that absent disclosure of each and every element in such a manner as to perform as the claimed invention performs, Cho cannot be used to establish a prima facie case of obviousness.

Applicant further submits that Lawrence fails to cure the deficiencies of Cho.

In view of the foregoing, Applicant submits that the References fail to teach or suggest each and every element of the claimed invention and are therefore wholly inadequate in their teaching of the claimed invention as a whole, fail to motivate one skilled in the art to do what the patent Applicant has done, fail to offer any reasonable expectation of success in combining the References to perform as the claimed invention

performs, and disclose a substantially different invention from the claimed invention, and therefore cannot properly be used to establish a prima facie case of obviousness. Accordingly, Applicant respectfully requests reconsideration and withdrawal of all rejections under 35 U.S.C. §103(a), which Applicant considers to be traversed.

In light of the forgoing, Applicant respectfully submits that the Examiner's rejections under 35 U.S.C. §102(e) and 35 U.S.C. §103(a) have been traversed, and respectfully requests that the Examiner reconsider and withdraw these rejections.

Regarding New Claim 73

Applicant has added new Claim 73 that depends from Claim 1, and that is directed to disclosed but unclaimed subject matter. No new matter has been added as antecedent support may be found in the specification as originally filed, such as at Paragraph [0103] and Figure 7 for example (Figure 7 particularly disclosing window position Wn overlapping the lines from window position Wn-1).

In view of the remarks set forth above regarding Claim 1, Applicant submits that Claim 73 is directed to allowable subject matter, and respectfully requests notice of allowance thereof.

The Commissioner is hereby authorized to charge any additional fees that may be required for this amendment, or credit any overpayment, to Deposit Account No. 50-2513.

In the event that an extension of time is required, or may be required in addition to that requested in a petition for extension of time, the Commissioner is requested to grant a petition for that extension of time that is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to the above-identified Deposit Account.

Respectfully submitted,

CANTOR COLBURN LLP
Applicant's Attorneys

By: _____

David Arnold
Registration No: 48,894
Customer No. 23413

Address: 55 Griffin Road South, Bloomfield, Connecticut 06002
Telephone: (860) 286-2929
Fax: (860) 286-0115